1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

or large calabashes, to ferment. One certain night, I was present at a beer-fermenting in a Choroti village. Proceedings commenced by two men sitting in the men's club house on either side of the fire, singing, with their backs to each other, and beating time with calabash rattles. After a while they continued this round about the hide in which the brew was fermenting. A man and a youth were singing, accompanied by a rattle, turning their faces up to the moon. Elsewhere, here and there, other men were bawling and plying rattles. Then the earthenware drum was brought

273

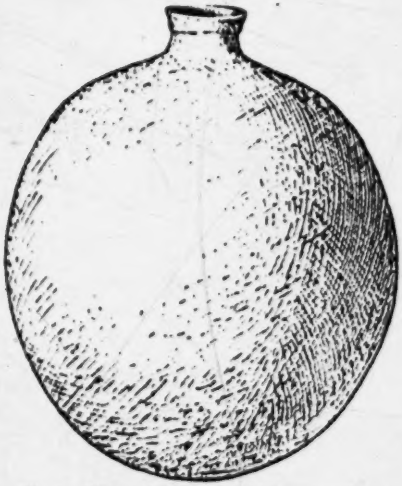

Fig. 133. Water pitcher. Yellowish brown earthenware. Choroti. Gran Chaco. Bolivia. 1/4. Rikem. 03. 3. 145.

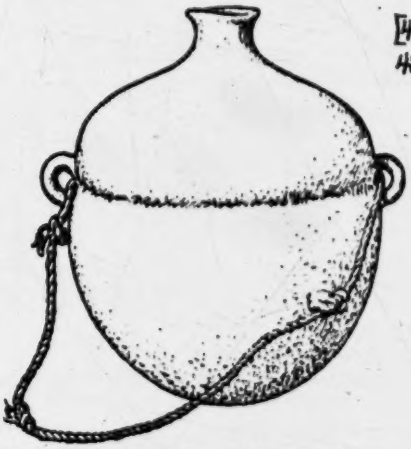

Fig. 134. Water pitcher with carrying cord of caraguatá. Reddish-brown earthenware. Choroti. Gran Chaco. Bolivia. 1/4. Rikem. 03. 3. 146.

[415 482]

out, and placed on a ring formed of straw. Monotonous drum beats thereupon gave accompaniment to the singing. This stopped about midnight, and there was a rush down to the river where some fishing was done, with a fairly good result. The fish was then grilled and eaten. This night supper having been satisfactorily discussed, singing was resumed and went on, supported by one drum and four rattles. The songs seemed to me to consist of nothing but refrains, something like: 'huh, huh, huh, huh, huh, lah eh lah, huh, lah eh lah, . . . huh, huh, huh, lah eh lah'. The singing was at first low, then suddenly rising in loudness, then again subsiding low. Many were raucously bellowing in unison. When one lot

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

273 of singers were tired out, others took their turn. In the morning there was some more fishing, and for breakfast was drunk the tusca beer that had been made with so much trouble, after having been strained through a dirty bag, and served up in calabash bowls. The Choroti believe that by singing they hasten the fermentation of the beer.

The tusca beer is of an acidulous, refreshing taste, but has a sickly smell.

The fruits of the chañar are boiled, whereupon the mixture is allowed to ferment.

The fruits of the algaroba are ground, and warmed up in water, then, like the foregoing, the brew is left to ferment in huge, filthy, calabashes, or in very large troughs of the wood of the bottle-tree.[1] I have seen the Ashluslay preparing yeast by chewing part of the ground algaroba, and then spitting it out into the rest. Chañar beer is of a sour-sweet, somewhat nauseous, taste; algaroba beer is good. The latter has a sweet, somewhat astringent, taste. When long fermented, it is highly intoxicating. Maize beer I have seen brewed here. It is especially well known to a great many tribes in South America. It has a pleasant and refreshing taste.»[2]

271 When, during their wanderings, the Indians of the Chaco do not come across any rivers, lagoons or wells, and thus find themselves threatened by a lack of water, they collect the water that, after rain, has gathered at the base of the leaves of the caraguatá plant, where it will keep fresh for many weeks.[3]

271 [415] 482 The Choroti fetch and keep water in large, oval, sometimes spherical, earthenware vessels. When these vessels, like the one reproduced in fig. 123, are without handles, they are carried on the back by means of a caraguata net, the carrying cord of which is either placed across the forehead or across the chest. Water pitchers are, however, as a rule provided with two vertically placed handles, and also a shallow groove which runs through the latter, the whole being designed to give a hold to the carrying cord (see fig. 124). The cord is rested across the forehead

[1] Chorisia insignis.

[2] Nordenskiöld (13), pp. 89—91.

[3] Professor von den Steinen writes of the Chaco Indians of northern Chaco that they collect water from the caraguatá »in denen sich auf dem Grunde des Blätterkranzes das Regenwasser ansammelt und Monate lang verhältnismässig frisch erhält« von den Steinen (1), p. 326. See also Grubb (1), pp. 95 and 96.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

or chest of the water carrier.[1] When the pitcher has been filled with water, its mouth is closed with a stopper of grass or leaves.

The cooking pots, which consist of burnt clay (figs. 125 and 126), are also used for roasting various vegetables. Pots of this kind from the Choroti are sometimes given wart-like decorations. These are either placed in rows some distance apart from each other (fig. 125) or in rows close together (fig. 126). This manner of ornamenting clay pots is of extreme antiquity in the New World, and occurs on grave finds right up through North America.[2] The little protuberances on the pot in fig. 125 have been produced in a different way to those on the handleless pot in fig.

Fig. 125. Cooking and roasting pot of earthenware burnt black. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 03. 3. 150.

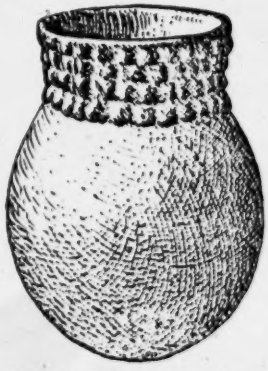

Fig. 126. Cooking and roasting pot of earthenware burnt black. Choroti. Gran Chaco. Bolivia. 1/2. Riksm. 10. 3. 54.

126. On the case of the former, they consist of small clay pellets which have been stuck on the pot before burning, whilst the protuberances on the latter probably have been pressed up out of the wet clay by the potters fingers.

All pottery is made by women. The clay is mixed with powdered potsherds, then well kneaded and formed with the hands into rolls, as thick as a finger, with which the pot is built up.[3] When this has been completed as to its shape, its surface is polished by means of a mussel shell or a

[1] Water-drawing and carrying is exclusively a work for women.

[2] See, for example, Holmes (1), pl. XI, fig. g, and Moore (2), fig. 42.

[3] Cf. figs. 217 and p. 214. On the subject of Indian pottery-making, see for example Holmes (1), and Nordenskiöld (10).

415 of a river mussel (fig. 133). These mussel shell spoons are seldom as large as the specimen here reproduced, which has a length of 14 cm.

I have seen neither food dishes nor spoons, made of wood, among the Choroti, but nowadays, at least, such are used by them.[1]

285 Among the Choroti I saw only one single piece of basket work (fig.
415 134). It consists of a small basket of the same shape as a kind of pot, which is common in the Chaco (see cooking pot in fig. 192), and it is probably only a direct copy, made in sport, of a clay pot; otherwise, basketry is unknown to the Choroti, and it is therefore probable that the object in question has either found its way to these Indians from the Chiriguano, or that some Choroti, having seen basket-weaving in a Chiriguano village at some passing visit, subsequently has attempted to produce, some similar work himself. It should be noted that the weaving technique in the basket here reproduced is the same as the one used by the Chiriguano.

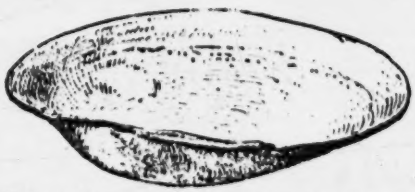

Fig. 133. Spoon, consisting of a mussel shell. Choroti. Gran Chaco, Bolivia. 1/2. Riksm. 03. 3. 167.

[17]

286 The Choroti keep no inconsiderable part of their goods and chattels
415 in large, nearly oval, knitted bags of caraguatá yarn (figs. 135 and 136). These bags are especially useful when the tribe is journeying or migrating. They are carried by the women in such a way that the tape or string within the ends of the bag is placed across the forehead, whilst the bag rests against the carrier's back. The carrying cord over the forehead keeps the bag from slipping down the back. For carrying water pitchers and other vessels of earthenware or calabash, the Choroti use carrying nets. On page 118 I have described the way in which these are used.

[285]

[482]

Fig. 134. Basket, Choroti(?). Gran Chaco, Bolivia. 1/2. Riksm. 03. 3. 144.

For everyday use the men have a kind of

[1] Nordenskiöld (11), pp. 86–90.

1: Rosen E-5 (1901-1902) 1924 SK6 Choroti SK6

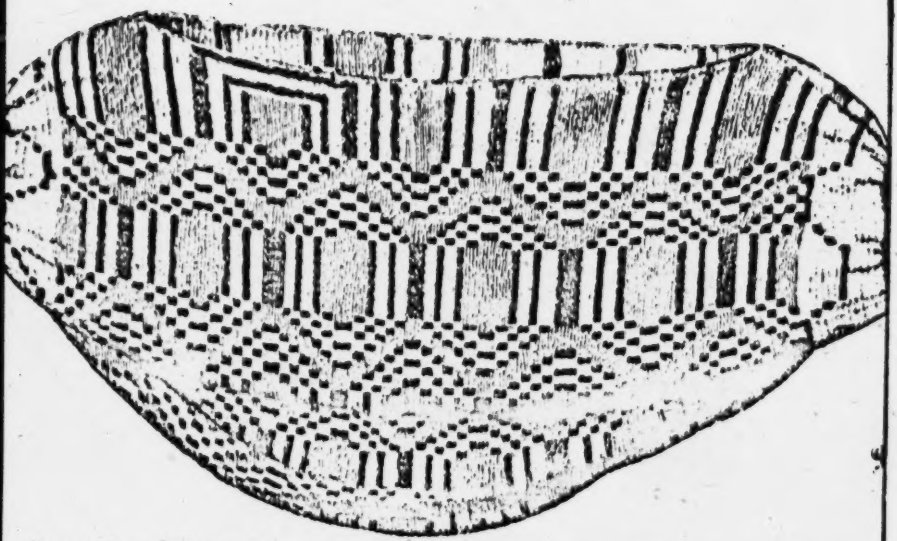

Fig. 135. Large bag, knitted of brown, black and yellowish-white (natural colour) caraguatá fibre yarn. Choroti. Gran Chaco, Bolivia. 9/5. Riksm. 03. 3. 134.

smaller caraguatá bags of the shape seen in figs. 137 and 138. These bags are carried by a string or narrow strap laid over the shoulder (see the man with a bow, fig. 96) or tied to the belt, and in them are kept a variety of articles that the Choroti men always like to have about them, such as fire-drilling sticks, tinder boxes, awls for blood-letting, colours for painting of the face, etc.

The caraguatá yarn is spun, without the aid of a spindle, only by twisting the fibres (of Bromelia serra) against the thigh with the flat of the hand. Some of the yarn is dyed with vegetable dyestuffs in order to produce variegated patterns in the knitting (see figs. 135—139). For the knitting, eyed needles of hard wood (fig. 140) are used. Similar needles of wood or bone are also used for sewing. Among the Choroti I have seen men's bags which had been knitted of woollen-yarn with long cactus spines, used as knitting needles (fig. 141). The woollen-yarn bag here reproduced is ornamented with red, brown and grey

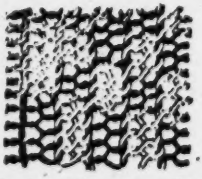

Fig. 136. Enlargement of the knitting of the bag in fig. 135.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6

43

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45

Fig. 43. Earthenware vessels from Pachacamac, Peru.
Fig. 44. Ouichua Indians.
Fig. 45. Chorotí woman.

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[p. 142]

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

XXI.

Carrying-utensils.

In the Chaco all heavy loads are carried by women. Like all South American Indians they carry heavy weights on the back and never on the head. The load is fastened by means of a band around the forehead. (Fig. 45)[1]. This is the one method of carrying known in S. America. The other is to fasten the load across the shoulders and round the chest. (Figs. 43 and 44). The pressure on the chest is generally equalized by holding with one hand the rope tied across the chest.

The Chaco tribes with whom we are here concerned bear their burdens in nets, never making use of baskets. In the accompanying table is indicated, by way of comparison, how the different tribes whom I got to know on my journeys bear their burdens.

On an examination of the literature dealing with the bearing of heavy loads by various Indian tribes we find that, in the greater part of S. America, the method is for the burden to rest upon the back, and to be fastened around the forehead. Only in the western and southernmost parts of S. America do the Indians carry heavy burdens in such wise that the burden rests on the back and is then fastened around the shoulders and chest, as e. g. among the

[1] Sometimes the bearer, in addition to the brow-bands, has also bands across the shoulders. I have never seen these, however, in the Chaco, and elsewhere only among Indians serving white men as bearers.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

Ona[2]), Quichua[3],)[4], Atsahuaca, Paez[5]),and the civilized Indians of Colombia[6]). To anyone studying the form of the cranium

	Number on map	Burden carried on the back with a band over the forehead.	Burden carried on the back and fixed on the shoulders and chest	In a poncho or the like.	Carrying-net.	Basket.	Both men and women bear burdens.	Burdens borne chiefly by women.	Children carried by means of bearing-bands.
Ashluslay	2			[1]		?			
Atsahuaca	32								
Aymara	10								
Chacobo	62								
Cháma	73								
Chané	5								
Chimane	21								
Chiriguano	4			?					
Choroti	1								
Guarayú (Guarayos)	40								
Guarayú (Pauserna)	41								
Huanyam	43								
Huarí	64								
Mataco	6								
Quichua	18								
Tambopata-Guarayo	6X				—			?	
Taplete	3								
Toba	7								
Vamiaca	63					?		?	
Yuracáre	22			—					

of the various Indian tribes, it will probably be of some interest to learn that there are in S. America two methods of carrying burdens so unlike each other, and having such dissimilar geographical extension.

The carrying-net (Map 25) is found in the western and southern parts of S. America. From all appearances it belongs to an older period of civilization than the carrying-basket,

[1]) In holders made of bark.
[2]) GALLARDO, p. 285.
[3]) WHYMPER, p. 109.
[4]) FERRIS, numerous illustrations.
[5]) PITTIER DE FÁBREGA, Pl. 4.
[6]) REGEL, Pl. 24, fig. 21.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

000 since it is used by most of the Gês-tribes who live in tracts where there is abundance of material for basket-making. The supposition that the use of carrying-nets among these tribes is due to the difficulty of finding suitable wicker is thus precluded.

The carrying-net is in use among the following tribes as well as those indicated in the table on p. 144: (45) Botokuds[1]), (27) Ona[2]), (67) Suya[3]), (28) Bakaïrí[4]), (28) Mehinakú[4]), and (28) Auetö[4]), (11) Chamacoco[4]), (8) Lengua[5]), (12) Mbayá[6]), (36), Ijca[7]), (10) Araucanians[8]), and (0,3) Taputya[9]). The (E) Diaguita[10]) seem formerly to have made use of carrying-nets; UHLE[11]) found carrying-nets in the very old excavations at (B) Arica.

In all probability various nets found on the coast of (A) Peru are also carrying-nets. In the Linden Museum at Stuttgart there are nets of this kind from Valle de Chancay. One of these, made of fine string, is 125 centimetres long and 30 centimetres broad (when stretched)[12]).

A C 482 [415] The waterpots are borne by the Choroti, Ashluslay, Mataco, Toba[13]), Tapiete, Lengua[14]), and Mbayá[15]) in the Chaco in a very characteristic manner (Fig. 45). Around the pitcher, which is indented at the middle and has two ears, there runs a cord. This is fixed by the woman who carries the pitcher

[1]) v. IHERING (2), Pl. 4, Fig. 7. WIED, Vol. I, Pl. 14.
[2]) GALLARDO, p. 285 Very simple form.
[3]) v. D. STEINEN (1), p. 194.
[4]) RADIN, p. 928.
[5]) GRUBB, p. 93.
[6]) SÁNCHEZ LABRADOR Vol. I, p. 271.
[7]) G. M. BOLINDER.
[8]) MASON, p. 535.
[9]) FRESCAROLO, p. 114.
[10]) AMBROSETTI (2), p. 449; QUIROGA, fig. 7.
[11]) (7), p. 30.
[12]) According to letter received from KOCH-GRÜNBERG.
[13]) Also the Toba on the lower Rio Pilcomayo. DUCCI, p. 8.
[14]) GRUBB, Fig. p. 99.
[15]) SÁNCHEZ LABRADOR, Vol. I, p. 291.

2: Nordenskiöld E-5 (1908-1909) 1919
SK6 Choroti SK6
Ashluslay SK5

around the forehead in the same manner as when other heavy burdens are carried. While being carried the pitcher hangs on the back. No other Indians in S. America, except the Quichua (Fig. 44)[1]) and possibly the Aymara, carry their pitchers in this manner on a cord passing through the two ears of the vessel. It reminds one not a little of the method prevailing among the Incas of carrying the «Aryballes» (see Fig. 43) so characteristic of the Inca period, and it ap-

Fig. 46. Clay doll. Indian woman with bearingband. Chorotí. R. M. (D. 346) 2/3. A — tattooing.

pears to me by no means improbable that the water-pitcher now used in the Chaco is a development of the aforementioned Incan type on which was also carried a rope. It is evident that the idea of carrying earthenware vessels on a rope, as well as the ears of the vessels (see page 212) is derived from the Western area of civilization. «Aryballes» are found in North Chile, in N. W. Argentine, on the Bolivian tableland, in the mountains and on the coast of Peru, and in the mountains and on the south coast of Ecuador. This type of vessel is considered by BOMAN and UHLE, no doubt

[1]) WIENER, p. 128.

2: Nordenskiöld E-5 (1908-1909)1919
SK6 Choroti SK6
Ashluslay SK5

correctly, to be Incan, and may, indeed, be looked upon as a «clue-fossil» showing the extension of the Incan civilization[1].

The women carry their children sitting on the hips or, sometimes, on a bearing-band. (Fig. 46). Such bearing-bands are found mostly in the eastern and northern parts of S. America. (Map 26).

I have seen them not only among the (1) Choroti but also among the (6) Mataco, (41) Guarayú (Pauserna), (40) Guarayú (Guarayos), (43) Huanyam, (24) Chimane, (32) Atsahuaca, (6 X) Tambopata-Guarayo, (3) Tapiete and (22) Yuracáre. They are not found among the Aymara, Quichua, Chiriguano, Chané and Chámа. Nor have I found bearing-bands in use among the Ashluslay and the Toba.

In the literature dealing with this subject such bearing-bands are mentioned as being in use among the following tribes: (45) Botokuds[2]), (07) Purí[3]), (15) Kayapó[4]), (38) Tupinambá[5]), (21) Coroados (Caingúa)[6]), (4 C) Guajajara[7]), (4 X) Gês-tribes, Maranhão[8]), (4 X) Tajé[9]), (20), Paressi-Kabiši[10]), (31) Chipaya and Curuahé[11]), (34) Jivaro[12]), (42) Caripuna[13]), (59) Crichana[14]), (46) Conibo[15]), (48), Kobéua[16]), (31) Ojana[17]),

[1]) See UHLE (2), p. 17; ROMAN, p. 203 and JIJÓN Y CAAMAÑO, p. 151.
[2]) v. IHERING (2). Pl. 5, fig. 8.
[3]) WIED, Vol. I, p. 136.
[4]) KRAUSE, p. 393 and 394, Pl. 25.
[5]) STADEN. Vol. 2, (p. 18.); PISO ET MARCGRAV, p. 274.
[6]) KOENIGSWALD, fig. 33, p. 31.
[7]) PLAGGE, p. 206.
[8]) RIBEIRO, p. 188.
[9]) NIMUENDAJÚ-UNKEL (2), p. 620.
[10]) MAX SCHMIDT (4), fig. 30.
[11]) SNETHLAGE, Pl. II.
[12]) FESTA, Pl. foll. p. 194.
[13]) KELLER-LEUZINGER, p. 105.
[14]) BARBOSA RODRIGUES, p. 165.
[15]) SALA, fig. p. 78.
[16]) KOCH-GRÜNBERG, (2) Vol. 3, p. 147.
[17]) GORJE (1), Pl. 7, fig. 19.